



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

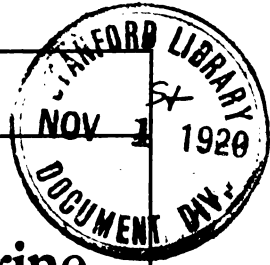
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

53/4

Committee

Merchant Marine





Marine

AN
MERCE

MA
KIE
KE

TOSH

PO

merce

AN
KE

COMMITTEE ON COMMERCE.

DUNCAN U. FLETCHER, Florida, *Chairman.*

GEORGE E. CHAMBERLAIN, Oregon.
JOSEPH E. RANDELL, Louisiana.
MORRIS SHEPPARD, Texas.
JAMES K. VARDAMAN, Mississippi.
JOHN K. SHIELDS, Tennessee.
THOMAS S. MARTIN, Virginia.
JOHN H. BANKHEAD, Alabama.
FURNIFOLD McL. SIMMONS, North Carolina.
JAMES A. REED, Missouri.
WILLIAM F. KIRBY, Arkansas.

KNUTE NELSON, Minnesota.
WILLIAM ALDEN SMITH, Michigan.
WESLEY L. JONES, Washington.
LAWRENCE Y. SHERMAN, Illinois.
WARREN G. HARDING, Ohio.
BERT M. FERNALD, Maine.
WILLIAM M. CALDER, New York.
HIRAM W. JOHNSON, California.
IRVINE L. LENROOT, Wisconsin.

WILLIAM L. HILL, *Clerk.*

ALBERT H. ROBERTS, *Assistant Clerk.*

LETTER OF TRANSMITTAL.

U. S. NAVY AERONAUTIC STATION,
SUPPLY DEPARTMENT,
Pensacola, Fla., February 19, 1919.

MY DEAR SENATOR: I hope you will not consider me intrusive in writing you again. I remember, however, that you were much interested in the subject of an American merchant marine when discussed under the awnings of the *Tennessee*, and am therefore taking the liberty of inclosing a copy of an article on the subject which I have recently submitted to the Naval Institute. The data is the result of many years of seagoing, and I firmly believe is solid and usable.

Very respectfully,

KENNETH CHAFEE MCINTOSH,
Lieut. Commander, P. C., U. S. N.

HON. DUNCAN U. FLETCHER,
U. S. Senate, Chairman Committee on Commerce.

AMERICAN MERCHANT MARINE.

U. S. C. N.

"That's a hundred and fifty thousand dollars in his vest pocket if he knows how to use it * * *. No; I didn't tell him the money value—he'd send his valet to find out."—"The Captive," Kipling.

I.

Away back in the days of grand political rallies, of torchlight processions and campaign songs and slogans, the days when men went about decorated with gold or silver beetles and the air was filled with shouts of "Remember the crime of seventy-three," and answering yells of "American tin," the question of ships began to stir and trouble a few—very few—farsighted men.

A little later it took form as a slogan of its own, and the excited gentleman on the cracker barrel would wave his arms and declare that the issues before the American people were imperialism and ship subsidy. When for the last time the American people declared through their representatives that they would not have ship subsidy other than for transporting the mails, that phase of the question subsided, but the question itself would not down. Laws and parts of laws were repealed, laws and parts of laws were passed, and still each year saw us less and less a maritime nation, more and more dependent on foreign bottoms to move our freight.

For a time it did not seem to make much difference, except as a matter of pride to the old expatriates of the Asiatic and the Mediterranean, who looked sadly at the display of British, German, Norwegian and French colors yonder in the bay and remembered when that bay had been full of Yankee clipper ships. Then, little by little, it began to become everybody's question and everybody's worry—America must have ships.

Some years ago, as editor of Guam's monthly newspaper, in a desperate effort to fill up eight pages we wrote an article entitled "Guam in the Future." It was an anarchistic and outspoken article; and when some weeks later we learned that no less a person than the Secretary of the Navy had taken cognizance thereof sufficiently to demand verification of its statements from the governor, we shook in our white canvas shoes. But the Secretary did more than verify—he disseminated information. To our infinite amazement we began to receive letters from Members of Congress, from the Land Office, from the Chambers of Commerce of San Francisco, Honolulu, and Manila, and from the governor of Samoa. It was a case of make good or back down, and we attacked the problem of Guam's commercial and financial situation with an energy born of

fright. Immediately our head ran hard against the stone wall of "there are no ships." We continued to write and struggle, with the very hearty backing of the governor; and after scoring several flat failures, finally summed up the problem as follows: "Without ships, Guam can not market her surplus products and will not raise anything to balance her imports. Until Guam raises a surplus for shipment, no ships can be induced to stop here. To make the planters work hard enough to attract regular shipping, some one must furnish a ship at a temporary loss." Apparently the Navy Department reached the same conclusion, and the old *Supply Maru* began carrying copra to Manila. There are now regular schooner lines plying from Guam both eastward and westward. The island is started toward economic independence.

In 1916 a Pan American trade congress was held in Buenos Aires. The United States High Commission was prepared to discuss banking and exchange problems, monetary standards, and credit systems. With one accord the South American delegates cried for "Ships ships! more ships!" Without them any system is useless, with their credit can quickly arrange itself. At that time Brazilian planters were begging small schooners to take away their coffee at \$22 a ton and over; and the price of coal on the Rio water front included freight rate of 110 shillings a ton.

In 1917 the submarine stated the question all over again in stentorian terms, ending with a thunderous exclamation point, and the world suddenly cried out in agony, "Send us ships or we die!" We stopped searching for the best, the quickest, and the easiest way. We had no more time for study. We had to build ships, and we built them, and we now have them in large numbers. So to-day we have on one hand the same old problems of trade development for which ships are the only answer; on the other a large number of ships engaged in an abnormal trade which if continued after the emergency has passed will place us in a position antagonistic to our present allies and our own shipowners.

The ships now at our disposal are grouped into five classes:

- (1) American-owned ships taken over for the war.
- (2) Foreign ships chartered.
- (3) Foreign ships requisitioned.
- (4) Captured enemy ships.
- (5) Ships built since the outbreak of the war by the Emergency Fleet Corporation.

Classes 1, 2, and 3 are ours but temporarily and must go back to their owners in a very short time. There remain indefinitely on Government's hands classes 4 and 5, numerically in excess of the first three classes. Each ship of classes 4 and 5 represents a large investment of money obtained by the sale of Liberty bonds, for which the taxpayer will be furnishing interest for some years to come. If we sell or lease the ships to privately-owned lines we must do so at a price far below their actual value; for beside the depreciating effect of the sudden offering for charter or sale such a large tonnage, laws do not permit American ships to compete with foreign ones in overseas business unless they can in some way materially reduce their initial cost.

In other countries initial and maintenance costs are both government-aided by subsidy. We have definitely declared against

form of subsidy other than for carrying the mails. Consequently, a private company buying our ships must beat us down to a figure which will enable them to operate. We will not get the full price to redeem the spent Liberty bonds and would have nothing but our annual interest charges to remaind us that we were once shipowners. To meet this interest we must tax a man enough to pay him back with his own money. Similarly, with the return of normal peace conditions and normal competition, any rental which we could exact for private charter would barely return us our interest and leave the bulk of the people saddled with the responsibility of producing the money necessary to repay their maturing bond investment. With all our distrust of the new and untried in governmental procedure, we are faced with the necessity of either costing ourselves and the country much money or of running those ships to profit ourselves. Until the last \$50 bond which entered into the refitting and construction of those ships is repaid, they can not be written into the national plant account. They represent an unfulfilled debt, and we have no right to dispose of them at a loss unless we first declare ourselves nationally bankrupt before our own people and persuade them to accept a settlement at something under cent per cent.

The problem of Guam is the problem of the southern Philippines. Many times multiplied, it is the problem of South America, of the China coast, of the entire world below the Tropic of Cancer. When the Government put a ship on the Guam run, the trade developed and an entire nation, small though it be, was set upon the path of independence. If we do not run our ships, we will as a Nation lose both money and trade. If we do not run our ships, we must look forward to undeveloped islands, unexploited markets, alienated friends. Both sides of the quandary are forcing us forward along the resultant line. We must run our ships ourselves.

Immediately arises the first objection in the form of the rights of private-owned steamship companies operating under American register. These companies were plying their trade and making a living before the war. At considerable inconvenience and danger to their carefully established good will, they patriotically stood silent while we took their ships from them and ran them for the prosecution of the war. Now, that we return them their ships, shall we take away their trade by competing with them? The Socialists might answer "Yes," but as yet they represent but a small minority of our people. At the present time such a course would raise a storm of protest from every line of business, from the farm to the factory. Let us avoid this objection, then, by resolving in the beginning to leave these gentlemen alone in their fields; in the wide world there is room for them and for us and for our allies as well. With every cockboat in the world working, there will for a generation be a shortage of ships, and probably there will never be as many as the world could use at any one time.

A glance at Chart I will shed immediate light on the problem. American steamship companies have by no means girdled the world as yet—have not even attempted to cover the available first-class trade, and have hardly touched the tramp trade at all. Surely, from these few lanes we may sheer wide and still employ all our tonnage. We may even leave the trans-Pacific field from which the Pacific Mail retired after the passage of the seamen's act in the expec-

tation that the run will be reestablished after the reconstruction. If not soon restored, effort should be made to induce private companies to again enter on the old oriental run; for there is a case of market and good will already existing, blown open by Perry's guns in 1854. As long as there remains in the world possible, logical trade for American planters, manufacturers, and merchants, our historic duty is to open the trade, to create good will and demand, and then to leave it to the citizens of the United States to exploit the new market we have given them. The market and the return goods will not be forthcoming until the ships arrive ready for business. The private-owned ships will not gamble on a market until they are assured of orders and a return cargo. And so, since the days of King Arthur, governments have sent out expeditions to the uttermost parts of the earth to make commercial treaties, to exhibit samples, and to bring them back, to create another market for the people at home to exploit.

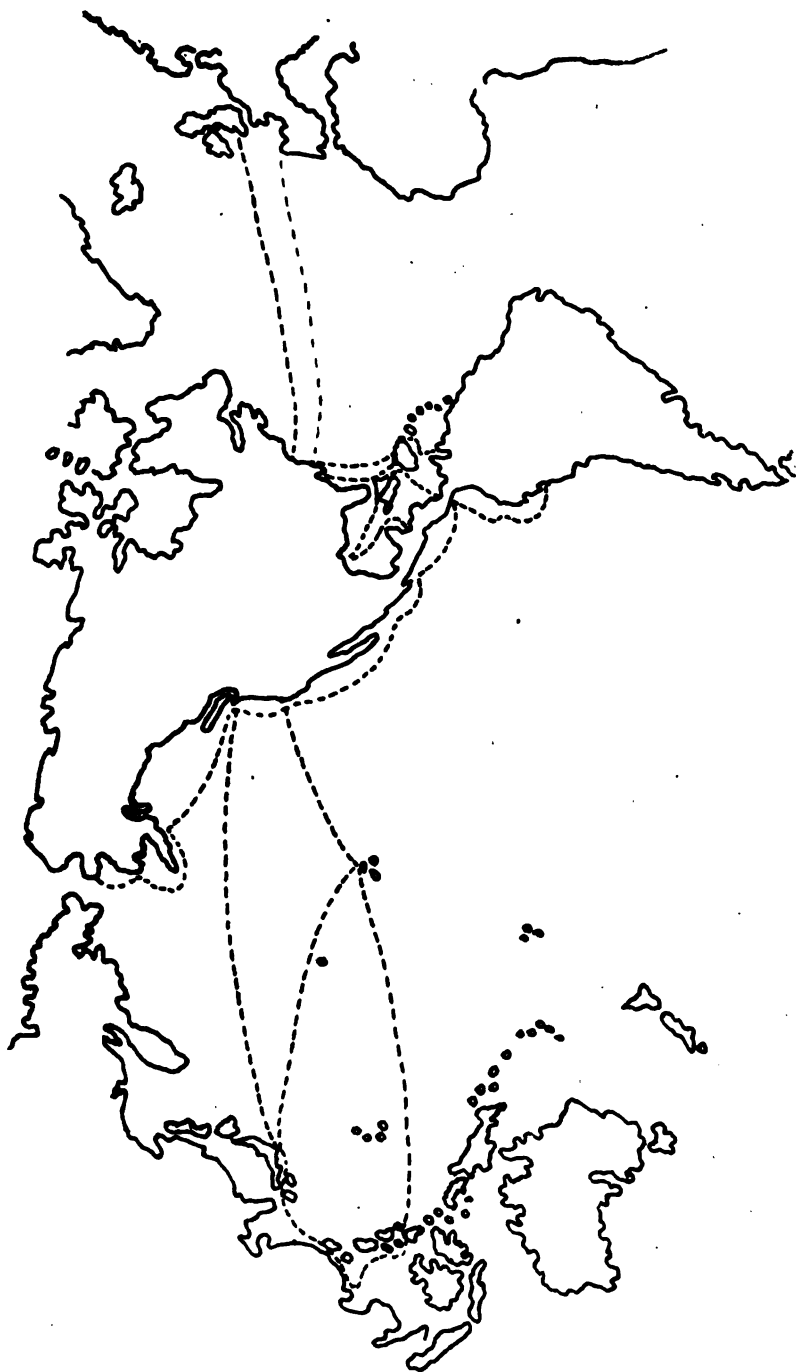
II.

In Chart I there appears but one line south of Panama, and that represents a desultory, semioccasional run of the Pacific Mail to Callao, the ships employed being the gallant survivors of an ancient fleet built in the old soft-iron days. It is true that there are American tramps encircling South America in the name of W. R. Grace & Co. but this company, huge and far-flung as are its interests, has not even scratched the market, which was once fairly well taken up by the Germans. American shipowners did not trust the South American run. They alleged, first, that credit was unsatisfactory; second that repeat orders were few; third, that a return cargo was uncertain. The United States in 1915 was avoiding South America from experiences of the past, and had not yet opened its eyes to changing conditions.

To illustrate: Some 20 years ago an American firm was invited to bid on a large amount of machinery and instruments of precision for the Argentine. The total order was in the neighborhood of \$10,000,000, and the company figured long and carefully. To the great resentment, the order went to a German firm at a figure slightly above their bid, and thereafter no attempt was made to expand their territory into South America. And yet the reason was based on pure misunderstanding of the desired market. The drawing accompanying the American bid showed scales of ounces and pound yards, feet, and inches. In a country which uses the metric system the natural thing to do was to award to the specification bidder to whom they already owed money, even at a slightly higher price.

The manager of a large department store in Santiago, Chile, was showing a party of American naval officers over his establishment. He had been educated at Columbia, and had decided pro-Gringo leanings; yet he led us past counter after counter laden with goods bearing the German mark. He answered our question by bringing out two aluminum saucepans of ordinary size. One was a heavily honestly built affair, seamless and well finished. This was American made. The other, while of the same size, weighed barely half as much, was soldered together, and had a wooden handle. It bore the familiar "Made in Germany" stamp. "Now," he said, "which do you buy, if you are a Chilean?" In view of the obviously better

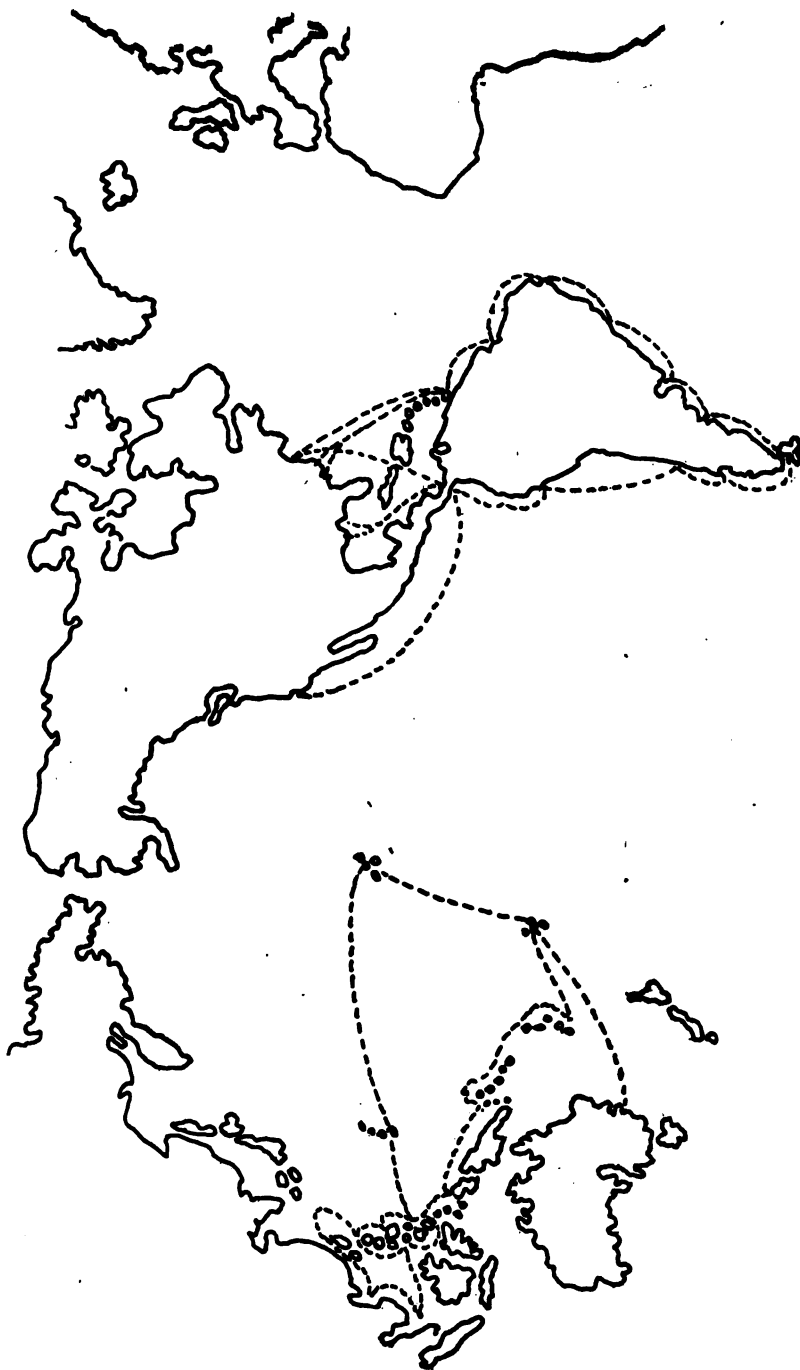
CHART 1.



PRINCIPAL AMERICAN STEAMER LANES IN USE BEFORE THE WAR.

1

CHART 2.



NEW LANES.

construction of the American pan, the question seemed foolish, for the prices were identically the same; but the answer depended again on knowledge of the market. The average Chilean cooks on a Spanish concrete stove, hardly more than an open fireplace. Flames play freely up and around the bottom of the pan. The American metal handle grows intolerably hot, so the Chilean looks regretfully at its solid construction and buys the usable though flimsy German product.

Misunderstandings of the sort quoted above can be and are rapidly being removed by modern merchandizing methods. There remains only the age-old distrust of the Latin for the man who speaks English. This dislike of the Gringo, one may be sure, was not overlooked by the Germans, who did all they could to keep it awake; and as long as a German was persona grata in South America, it was a very real obstacle, for the South American would rather make 5 per cent trading with a friend than 15 trading with a man he does not like. Conversely, however, the South American remembers his enemies, and the fact that practically every country south of Mexico broke diplomatic relations with the late enemy is a guaranty that his name will remain a hissing and a byword long after we have forgiven him and let him buy and sell in our market place.

The bulk of South American trade was formerly German, but unless we deliberately force Brazil, Chile, Peru, and the Argentine back to German markets, it will never again be so. The fact that we did not do the thing obvious to the Latin mind and annex Chihuahua in 1915 stands as proof to our southern brethren that we have no ambition to dominate the Western Hemisphere to their detriment. There is also reason to believe that the thoughtful work begun a few years ago will end in a satisfactory international credit system. Other points of contact being smoothed away, the merchants of South America stand ready to welcome us with the open arms. To reach those arms there must be ships. Private companies have not got the ships, nor will they have until the trade is solidly on a paying basis. We have the ships, and it is our bounden duty to the country to make possible its entrance into that market. The coffee, sugar, and rubber of Brazil, the beef, hides and grain of Argentina, the nitrates, copper, and minerals of Chile and the precious metals of Peru await our ships and their people await the goods we may make for their needs.

III.

We have for almost a generation been warned in red-hot, impassioned language to guard against the "yellow peril." From 1905 up to the outbreak of the great war, not a year passed without apparent and sometimes real danger of war with Japan, and the possibility of an awakened China and a solid Asiatic alliance against us was a bugbear continually in sight. We know now that the majority of this talk and the majority of the friction with Japan may be contemptuously laid at the door of the bosche, who assiduously sowed the seeds of misunderstanding. Such of the trouble as was caused by us or by the Japanese was the direct outgrowth of that misunderstanding, and also of the other German propaganda and Germanophile fetish which led Japan dangerously near to Teutonic line of thought of domination and supremacy. Both parties now know that

they have been duped by a third, and that in place of being natural enemies, Japan and the United States are logically friends and business partners. As for China, she is to-day and for some time has been solidly, blindly, and almost fatuously our friend. Had China dared, there is every indication that at several periods of nineteenth century history she would gladly have closed her ports to the world at large and made the United States and possibly Great Britain her only creditors and customers.

The possibility of shutting out even Great Britain is in view of the opium trade from India, which every Chinese Government has hated and been unable to stop. Our position as popular favorite has been ascribed variously to the missionaries and to our return of the Boxer indemnity. Neither reason is a true one. When the missionaries are not inflaming the resentment of the inland and medieval Tao Tsai or the fanatical secret brotherhoods of Mongolia, they are furnishing exactly the same metaphysical interest for the philosophical and hair-splitting Chinaman as the missionaries of other nations. Even where longest established and most firmly settled, the missionaries in China have made no preponderating impression on the vast Chinese people. Even in Macao, Jesuit since the fifteenth century, Chinese Mahomedans predominate, with Taoists a close second. And in North China, Marco Polo found a large percentage of Nestorian Christians, whose descendents in doctrine, like the adherents of Thibetan Lamaism, consider themselves Christians already and considerably nearer to the root of the matter than the missionaries themselves. As for the Boxer indemnity, not one Chinaman in a hundred thousand ever heard of it. No; our popularity in China has been built solely on our trade with China. Alone among the nations we never "lost our face" in the days of clipper ships. This is not hard to understand when we consider the men who manned the old American stick-and-string merchant marine—hard-featured, teak-faced down-easters, keen business men, worthy opponents in sharp practice, but absolutely men of their word when once definitely pinned to a bargain. No one more calculated to delight the heart of a Chinaman can be imagined.

Moreover, in later days, when our flag was seen in the Orient only on a few large liners touching the greater ports, our fair fame was kept bright by the commercial missionaries of the Standard Oil Co., whose tiny lamps and 5-gallon oil tins have become a necessary feature of the economy of the most remote river village, and so powerful a factor for prosperity, contentment, and education that the Chinese Government is as grateful as any government is capable of becoming. The oil business of China is ours, and is being taken care of by private enterprise. Clearly we have no shadow of reason for entering that particular field; but is oil the only American product which China would use if she could and which America would ship if guaranteed a market educated and waiting? We may even avoid competition with Japan and leave her the textiles trade, which she has captured since the war with Russia. The most superficial inquiry should unearth some unfilled need, not of the China coast merely, but of every one of her 400,000,000 people. To begin, the fulfillment of that need is legitimate Government business, and thereafter the American merchant and manufacturer will have another dependable source of revenue and China another reason for her friendship with us. The "yellow peril" will be pushed just that much farther back into the limbo of exploded bugaboos.

Moreover, since the German-made mumbo-jumbo of regional "hegemony" has been laid to rest without tears, there is no more reason for commercial antipathy between the United States and Japan than there is for a war between John Wanamaker and Andrew Carnegie. Four hundred million Chinamen eat and wear and play with more than both of these countries can ever sell them. Besides, we are fairly good customers for each other, and can be better ones if we like.

IV.

The ever-reliable and dependable World Almanac not being at hand, I am unable to state the population of the southern Philippines. However, there are several hundreds of thousands and possibly several millions of people there in a state of civilization which grades from something better than the absolute primitive to something considerably less. The Moro, after substituting Islam for Rome, may be taken as a fairly good picture of our crusading ancestors, with his love for arms, high standards of personal honor, and easily touched pride. He represents the upper level of the population, the lower approximating the Hottentot, who can carry on a free and untrammelled conversation with a dog-faced baboon. We are attempting to civilize them with schools and churches. We may succeed in pacifying them entirely by those methods, but unless we return to the Jesuit tyranny of 300 years ago we will never make them producing members of the community by either religion or education. We must show them something desirable which they can gain only by working better and harder than is necessary to live as did their grandfathers; we must create a need. Once felt, that need will do more than any teaching to induce husbandry, trade, and thrift. The old, disreputable Blackbirders realized this and steered clear when possible of ports where missionaries were to be found. They were implanting the needs easiest to create—gin and guns—and wished no interference. At that they did not collect in their busiest days 1 per cent of the possible exportable goods of the islands, and they caused no greater expenditure of labor than is necessary to pick up dry coconuts and sea snails. The industry of the southern islands and of the South Seas in general is gauged by the price of hardtack, canned salmon, and blue denim. Here is a fertile field for endeavor, and again we crash against the same old obstacle—without ships there will be no cargo; without cargo there will be no ships. Again, it is the historic duty of the Government to enter the first wedge and drive it home. Those islands will one day be developed to enormous and valuable trade by some one. It is logically ours, even if we abandon the Philippines at some future date, for Americans are the only whites in the world for whom the Moros and the lesser nations of the Southern Archipelago have ever felt the slightest respect. They have liked us and considered us capable and worthy opponents even while splitting our heads with a bolo, for unlike the Tagalog, the southern islander bears no malice and admires a good sportsman.

One item which the trend of matters in the civilized world will soon demand insistently from the South Seas is copra. The war has taught the world the absolute necessity of fats and oils; and while the steady decrease of the world's animal herds has in the past been a subject for uneasy headshaking, it is now becoming a question

of dire and immediate urgency. Cottonseed oil, peanut oil, olive oil—these and more are being feverishly developed to replace the rapidly diminishing supply of edible animal fats; but greater than any of these and as yet almost untouched in coconut oil and its by-products. Nine-tenths of the world's copra is the result of some tattered or even naked islander's wanting a bottle of beer or a can of salmon. In a few places copra is being systematically grown and dried, notably in Samar; but even in Samar the output is limited by the transportation and the fact that no particular reason has been offered to spur the native to regular effort, and Samar copra is not of the best quality at that. Copra has been long a neglected asset of the world, and until the establishment of the India Products Co. of Philadelphia, practically the only markets for high-grade copra were Hamburg and Marseille. Even there, its use was largely confined to toilet articles and its food-value overlooked. And even with this limited and fickle market, medium-grade copra was worth \$12 per hundredweight on the docks of Marseille as long ago as 1911. With a very little effort on our part, the South Sea output of copra could be multiplied by 500, with a consequent gain to the world's supply of fats; and every pound of it could be carried in American bottoms and should be. And every cent of its purchase price at the beach could and should be spent on American goods brought in American ships. The desires of the islanders now range from beads and red calico to gilt mirrors and musical clocks. We have the ships to develop this trade, and if we do not use them, we will be omitting one of the historic duties of a Navy to the Nation that supports it.

Another item which we can and must cultivate in these islands is kapok, or tree cotton. In 1912, samples of Guam kapok sent to the Cotton Exchange of New Orleans for information as to its commercial possibilities elicited the reply that it would not spin or gin and was valueless. In 1913, not 18 months later, the burning of a single warehouse full of kapok in Manila caused a rise in price of \$150 per ton. Kapok had found its use, and the world was clamoring. It constitutes practically an American monopoly at present, and while the Navy alone can come near to using the world's entire output, that output measures only desultory gathering from age-old trees. Nowhere has kapok been established as a main line, nor has it been planted and cultivated, yet from the jungles of Guam alone, some 20 tons could be gathered annually. Guam is 30 miles by 9 in its greatest dimensions, and its kapok trees are far enough apart to be noteworthy when found. When we bring goods of home manufacture to the islands sufficiently desirable to make the effort worth while, there is practically no limit to the kapok we can take away.

Trepang or "beche-de-mer" has a ready sale in China and tons more than have ever been cured cumber the beaches and embarrass the swimmer in every South Sea island. Millions of feet of hardwoods wait the enterprise of the judicious forester; shiploads of dyewoods and spices are there to be taken away. Coals and metals lie waiting to be mined in these southern islands. The trade of the world needs them all; but the ships of the world must see them waiting on the dock before they will call. We must not only put them on the dock, but build the dock as well.

V.

Some philosopher once made the discovery that the darkest place in the room is exactly under the candlestick. To look at the chart it would appear that the Caribbean and the Gulf were fairly well covered by existing steamship lines. It is, then, rather a shock to the inquisitive American when he inspects the wares of the average shop in the average West Indian town. I do not mean Habana or San Juan, for these cities have long had a definite trade link with the United States, and the ships and merchandise have appeared to handle and balance it. But we have also for many years had direct and frequent communication with Santo Domingo by way of the Clyde Line; yet in the normal Dominican shop we find Danish butter and herring, German lamps, clocks, and trinkets, French canned goods, and a multiplicity of Spanish wares. Such American goods as are shown are of a grade not salable in the United States, with the exception of bottled beers and refrigerators to keep them in. Half of this American export list will soon stop, and its absence may stop the other half. This poor showing in the shops of so near a neighbor has solid reasons, heretofore potent, but now removable by taking thought. First of all, since the days of President Grant in Washington and President Baez in Santo Domingo, the fear of annexation has led the Dominican to open hatred of "los Yanquies." Since our war with Spain this dread has at times become hysterical. As the bishop of Santo Domingo expressed the popular feeling, "Puerto Rico—Guantanamo—Panama—Nicaragua—Haiti—St. Thomas—and now you are sitting in our forts." "Better the head of a rat than the tail of a lion," cries the Dominican. But since our military occupation this feeling is changing. Admiral Knapp has been a revelation to Santo Domingo, and they begin to believe that our purpose is much more to preserve the integrity of their republic than to destroy it; that annexation by the United States is possible only as a last resort to prevent their annexation in part or in whole by a European power. They also are undergoing an era of solidity and progress which passes their wildest dreams—even outruns the plans of the late and unlamented Leli Heurreaux, who compensated his lack of justice and morality by a real patriotism and breadth of vision. The anti-Yanqui feeling is being rapidly conquered, and even at the beginning of the occupation, many prominent Dominicans were being bitterly lampooned in the patriotic press as "ayanquizados."

Communication is now existing here, and the only need is for a bit of careful merchandizing to multiply our Dominican trade many times. The other end of the island, Haiti, is virgin territory; and legitimate ground for our endeavor. Already the majority of invested industrial capital is ours. We are to build Haiti's roads, railways, and docks. Should not Haiti's payment of chocolate, dyewoods, and coffee come to us in our own ships? Lasting good will has already been gained and the sound of "Caco fini!" brings a grin of pure delight to every black face in the agricultural part of the country.

The east coast of Central America is worked after a fashion by the United Fruit Co., the Central American Trading Co., and Hubbard-Zemurray. American goods, more or less adapted to the market, are floated down the coast, but what these gentlemen chiefly want

for the return trip is a cargo of bananas. They will take other freight gladly if presented for shipment and if there is room in their holds. There has never been any violent effort made, however, to induce much production aside from fruit, and while the banana trade has no doubt been lucrative, the fact that the republics between Mexico and Panama live mainly by the desultory peon labor of the fruit plantation has made possible the never-ending series of revolutions and gunboating jobs that have been ours. Why not spend some of the time we use in preserving law and order by doing a little trade missionary work which will inevitably lead to more settled conditions? A busy man dodges a fight, and an idle one is apt to pick one.

The marines in Managua have, as usual, produced the opposite from the effect which was expected by the Latin-American world. Instead of continuing a sore spot and an offense against Nicaraguan sovereignty, they have convinced all hands that we do not wish to either conquer or annex Nicaragua. Let it also be remembered that all of these countries joined us in breaking relations with the Hohenzollern government. Most of them had no particular reason for doing so; but their action is a measure of their wild enthusiasm at what they consider a guaranty of their future. There were many of them who believed us a bully of small nations and a coward toward big ones. When we openly tackled the biggest and fearfulest bully in the world, their excitable Creole hearts flared into similar action. With the Central Americans we have "made more character" in the past two years than in any previous fifty, and their friendship and their trade are ours to pick up if we will.

On the west coast the same psychological advantage, long unattainable, is now ours; and here we have not even a line of casual fruit steamers—we have practically nothing but the semioccasional staggering old Pacific Mailer ambling in between visits of the somnolent Pacific Steam Navigation Co. and the spasmodic C. S. A. V. The Cosmos Line, an offshoot of the Hamburg-American, was rapidly absorbing all the cream of the west coast from Mazatlan to Chiloe, and the Cosmos Line is now out of business and out of favor everywhere but in Mexico. Is there any reason why the copper mined by the Guggenheims in Chile, the silver taken from the street of Cerro de Pasco by the Palmer Syndicate, the mahogany cut by American firms and floated down to San Marcos Bar and Salina Cruz should not be freighted away in American ships, built and manned in the United States? If it paid a German liner, 12,000 miles out of Hamburg, to work 42 ports from Valparaiso to San Francisco, stopping to "land a cabbage and a barrel of water and take on an old woman and a parrot," why should it not pay an American freighter, 4,000 miles out of San Francisco or 2,000 out of New Orleans?

The country is weary of the long feud between rail and water borne traffic which has killed the once-glorious Mississippi and partially paralyzed the Panama Canal. Moreover, the railroads are weary and the shipowners are weary. Indeed, this seems to be another rivalry of the past which has been made silly beyond all measure by national growth. There are not enough freight cars, and freight cars and ships together are none too much to handle the coast-to-coast business. Building many more railroads is slow and costly—the ships are in our hand; and unless those ships are used, some good profitable

coast-to-coast trade will not be carried on. Their use, incidentally, should land a few heavy punches on the solar plexus of our national tyrant, the high cost of living. It should not be difficult for a Government-operated line to keep cargo rates at a figure which will permit the struggling railroads to carry their normal capacity and so reorganize their overdriven systems. There will be enough left over after the freight cars are laden to send more than one vessel through the canal down to her Plimsoll mark.

VI.

The same factors which have contributed to the spectacular and world-wide collapse of the German merchant fleet and German-made good will have placed ships in our harbors and good friends on our calling list. Before the war, the ships of our allies were working to capacity, and so were the ships of neutrals. The submarine has decreased those busy fleets, but they will be soon reconstituted. Meanwhile, there remains the huge vacancy left by the withdrawal of German ships and German friendliness.

Not a single article of commerce, not a single pound of freight has been so far mentioned in this article to which any of our friends ever laid the shadow of a claim. Our late enemies once gained this trade more by lying about us than by open competition, more by our own restrictions on our ships than by their superior merchandizing ability.

The trade is there and the ships are here. Go to it, America!

VII.

By this time probably every reader is wondering what will become of the fleet, if all this comes to pass, if the Navy keeps and operates this great United States commerce navy. Operating modern men-of-war is not a stationary science in any of its branches, and a lifetime can be profitably spent in study and effort to perfect oneself in any one of an officer's many duties. The gunboat officer, though doing strictly naval work, often laments that "By the time I get back to the fleet I won't be able to even put a name on half the gadgets I see!" While officers and men are plying around the world discharging tinned tomatoes and taking on teakwood and tea, what will become of their fighting education? If it be necessary for the Regular Establishment to man our commerce fleet, the ships must lie idle, for even in the unheard-of contingency of Congress authorizing a regular Navy of any such size, such duty would guarantee that a good 75 per cent of our expensively educated officers would soon become professionally behind the times and exceedingly mediocre in the performance of their legitimate Naval duty. The fighting fleet must remain the fighting fleet, without any further amount or professionally stagnant duty than it now has of necessity. Fighting ships, like fighting men, must be drilled, drilled, drilled until the human approximation of perfection is reached, or they are something less in value than the country has paid for. By the time a midshipman has been given a groundwork which will fit him for specialty work as engineer, gunnery officer, aviator, radio or torpedo man, metallurgist

or ballistician, in addition to being a seaman and a navigator, he is far too valuable to be allowed to rust as third mate of a tramp freighter or even of the *Leviathan*. We must keep a keen edge on our sword, and we can not do that if we use it as an ax or a hoe.

The answer has already been ably presented. The officers and crews of our Government-operated ships should not be selected haphazard from the Tarry-Johns of the world. They must be our officers and men, upon whom we may depend in time of war or threatened war; for modern war has made the freighter as great a factor as the fighter, and we must never again have to educate professionally our transport and train complement after hostilities have begun. The commerce fleet must be manned by a personnel just as entirely at the command of the Navy Department as are we of the Regular Establishment. They must form a permanent naval reserve. If at some future date it again becomes necessary for us to take over commercial ships for war purposes, we must not be delayed and the fleet must not be hindered by having to make crews and furnish officers for them. At the outbreak of hostilities, the Navy should be called on for nothing more than divisional or convoy commanders, guns, and gunners. The ships should be ready to operate as they stand and steam, their commanders proceeding on their wartime errand without wasting more time than is necessary to get out their mobilization orders from the safe and tear open the envelope. Men and ships, the commerce fleet must be Naval Reserve. Their pay and maintenance must not be charged against the Navy except when they are actually mobilized but must be covered by the proceeds of their voyage. We must avoid even the appearance of expense to the taxpayer. He has not always the time to examine both sides of the ledger, but he is sure to see the annual total of the appropriation bill.

There need be no fixed period for enlistment in this reserve; in fact, if we fix a term of sufficient length to insure a solid training we might have difficulty in recruiting. Men and officers should feel free to leave at the end of short periods—say after a term of six months for enlisted men or a year for an officer. They must, if they so leave the service, hold themselves in readiness for call in time of war for some years afterwards; and naturally they would by so doing lose any benefits of continuous service and longevity which they might otherwise receive. Ratings for men should be as far as is necessary, the same as in the Regular Establishment, carry the same rates of pay and the same four-year increases. Rank for officers should grade from cadet (midshipman) up to and including lieutenant commander for the deck and engine room in time of peace, up to and including the rank of lieutenant for the supercargoes, pursers, and doctors. The control and center of this Reserve must be situated in the Navy Department, and a regular officer with the rank of rear admiral and the title of chief of operations (commerce) should be their commander in chief under the Chief of Bureau of Operations. His duties, however, should have to do solely with the enrollment, detail, and discipline of the Reserve personnel.

The ships themselves must in the nature of their pioneering duty be closely in touch with the internal and merchandising conditions of the country; and so our commerce fleet directorate can not hope to be successful under the guidance of seagoing officers only. It

must be closely affiliated with the Navy, also with the Consular Corps, but more than either, it must be civilian, nonpartisan, and commercial. The following make-up of the board of directors, U. S. C. N., is suggested:

Chairman, ex officio, the Secretary of the Navy.

The chief of operations (Commerce).

Directors elected by the Chamber of Commerce of—

New York.....	2
Chicago.....	2
Boston.....	1
Philadelphia.....	1
Baltimore.....	1
Norfolk.....	1
Savannah.....	1
New Orleans.....	1
Mobile.....	1
Galveston.....	1
San Francisco.....	1
Seattle.....	1
Honolulu.....	1
Manila.....	1
Nonvoting attachés to the board of directors, 8, as follows:	
From the staff of the commander of train, U. S. N.....	1
From the Bureau of Supplies and Accounts, U. S. N.....	1
From the Consular Corps, State Department.....	1
From the Department of Agriculture.....	1
From the Department of Commerce.....	1
Delegated by the Pan American Union.....	3

Elected by the board of directors, 2 secretaries.

Our United States commerce navy begins to take definite and feasible shape.

VIII.

For purpose of determining cost, it would appear that the only feasible method of estimate will be to as near as possible average the ships into classes. Roughly we can divide our commerce fleet into four types, i. e.:

1. 2,000 tons, or "lake" class.
2. 5,500 tons, or "western" class.
3. 7,500 tons, of the Emergency Fleet Corporation type.
4. Captured vessels.

An approximation of cost which will not be less than actual necessities will enable us to determine the freight tariff which will enable us to operate; and in fixing this tariff we must bear in mind that the main duty of the commerce navy is to open new fields as soon as possible, and that at present tariff rates are abnormally high, and so can not be taken as a permanent basis for figuring. Actual cost, plus 20 per cent overhead, divided by probable average tonnage of cargo, must be our minimum to break even. If we have then latitude to collect a bit of interest on our investment, the taxpayer wins. If we have not, he does not lose. Either way the country wins. Therefore, our only real problem is to find out if we can operate without a Government annual appropriation to meet expenses.

First, cost of operation and overhead. It will be necessary only to estimate on the smaller type of captured liners to discover whether they can be made to pay. Under normal peace complements and a regular run, the *George Washington* should require an annual upkeep

of not more than 180 per cent of the *Antigone*; but her carrying capacity will reach 300 per cent. Consequently, if the *Antigone* can work to profit, so can the larger ships. What complement will she require, what stores, what provisions, how much coal? In the following table, I realize that most naval officers will consider me as having sent a ship to sea undermanned, and most ex-merchant officers will consider me scandalously extravagant. I know, however, that no merchant skipper would hesitate to take the *Antigone* to sea in peace times with a crew of that size, and I believe that, with a well-trained crew accustomed to the ship and her installations, four guns' crews at the outbreak of war would make her fit to do the duty she has been performing since December, 1917, as a transport.

PROPOSED COMPLEMENT U. S. C. S. "ANTIGONE."

In command, 1 lieutenant commander.
 1 lieutenant.
 1 lieutenant (junior grade) } deck officers.
 1 ensign.
 1 lieutenant commander, chief engineer.
 3 machinists or chief machinists.
 1 boatswain.
 1 carpenter.
 1 medical officer (rank of lieutenant).
 1 supply officer (rank of lieutenant).
 1 pay clerk (rolls and manifests).
 1 pay clerk (commissary and general storekeeper).
 1 chief quartermaster, 1 chief boatswain's mate, 1 chief coxswain, 3 chief yeomen, 6 chief machinists' mates, 1 chief carpenter's mate, 1 chief pharmacist's mate; or 14 chief petty officers.
 4 quartermasters (2 first class, 2 third class).
 2 boatswain's mates, first class.
 10 coxswains.
 10 yeomen (2 first class, 2 second class, 6 third class).
 12 machinist's mates (6 first class, 6 second class).
 4 electricians.
 2 carpenter's mates, first class.
 1 pharmacist's mate, first class.
 6 storekeepers, first and second class.
 6 water tenders.
 6 oilers.
 6 firemen, first class.
 12 firemen, second class.
 120 firemen, third class.
 1 boiler maker.
 1 plumber.
 1 copper-smith.
 20 seamen; 30 seamen, second class; 2 officers' stewards; 4 officers' cooks; 4 ships' cooks; 10 mess attendants.
 Total, 14 officers, 288 enlisted men.

Annual pay roll	\$175,000
Annual rations	52,560
Annual coal (6 voyages, round trips)	66,000
Annual stores	50,000
	<hr/>
	343,560
Plus 20 per cent overhead	68,712
	<hr/>
Total cost, annual	412,272

At 6 voyages per year (12 runs), and allowing that the ship is loaded to an average of 75 per cent capacity, the *Antigone* should haul 60,000 tons per year.

Hence we have an average haulage cost of \$6.87 per ton, and must use the ship on a run where she can normally expect to receive a freight tariff slightly in advance of that. One guess is enough—remember that \$22 per ton coffee and 110-shilling coal.

Our first regular service would look something like this:

Philadelphia to Trinidad (12 knots), 6 days.
 At Trinidad, 1 day.
 Trinidad to Para, 5 days.
 At Para, $\frac{1}{2}$ day.
 Para to Bahia, $3\frac{1}{2}$ days.
 Bahia to Rio de Janeiro, 3 days (run down $12\frac{1}{2}$ days).
 Lay-over at Rio, 4 days.
 Rio to Bahia, 3 days.
 At Bahia, 1 day.
 Bahia to Para, $3\frac{1}{2}$ days.
 At Para, 1 day.
 Para to Trinidad, 5 days.
 At Trinidad, 1 day.
 Trinidad to Philadelphia (or Baltimore), 6 days (run back $20\frac{1}{2}$ days).
 Total round trip voyage, 44 days; overhaul, 16 days; total, 60 days, or six voyages per year.

And so:

UNITED STATES COMMERCE NAVY.

Beginning January 1, 1920, the following schedules will be placed in effect:

Philadelphia to Rio de Janeiro via Trinidad, Para, and Bahia. Ships *Pocahontas*, *Madawaska*, *Aeolus*. Sailings on the 1st and 20th of each month.

Freight rates:	Per ton,
To Trinidad.....	\$6.00
To Para.....	12.00
To Bahia.....	14.00
To Rio.....	16.00
Trinidad to Para.....	6.00
Trinidad to Bahia.....	8.00
Trinidad to Rio.....	10.00
Para to Bahia.....	2.00
Para to Rio.....	4.00
Bahia to Rio.....	2.00
Passenger rates:	
To Trinidad.....	65.00
To Para.....	100.00
To Bahia.....	125.00
To Rio.....	150.00

Beginning January 10, 1920:

Baltimore to Rio de Janeiro via Trinidad, Para, and Bahia. Ships *Antigone*, *Susquehanna*, *Huron*. Sailings on the 10th and 30th of each month. Freight and passenger rates as above.

That undercuts present rates by nearly 50 per cent and, in fact, is below normal; and we find that we will clear, not counting any passenger traffic which may come our way, \$5.13 average on 60,000 tons for each of the above six ships, or \$1,846,800 per annum on six of our slowest and oldest ships. Interest on \$46,170,000 worth of Liberty bonds.

Next, the west coast of South America. Since the opening of the Panama Canal and the consequent shortening of this run by some 7,000 miles, our best schedule would seem to be something like this:

From New Orleans to Valparaiso, *De Kalb*, *Martha Washington*, *Princess Matoika*. Sailings on the 1st and 20th.

From Mobile to Valparaiso, *Covington*, *Mercury*, *Powhatan*. Sailings on the 10th and 30th.

Time consumed in voyage (12 knots):

United States to Colon, 5 days.

Canal, 1 day.

Panama to Guayaquil, 3 days.

At Guayaquil, 1 day.

Guayaquil to Callao, 3 days.

At Callao, 1 day.

Callao to Valparaiso, 5 days.

Layover at Valparaiso, 5 days.

Total length of voyage, 43 days; overhaul, 17 days; total, 60 days, or 6 voyages per year.

As the above ships will perhaps average a few tons less than the Rio ships, we can not expect to clear more than a million and a half from this run: but that accounts for the interest on \$37,500,000 more Liberty bonds.

Our traffic de luxe must necessarily be between New York, Montevideo, and Buenos Aires, and on this run we will put our best, *George Washington*, *Agamemnon*, *America*, *Mount Vernon*, *President Grant*, and *Von Steuben*. They will sail every 10 days, and they will average 16 knots while under way. They will touch at the same ports as the Rio ships, in order to allow those who wish to pay for a luxurious passage to give up their money, but the bulk of their work and practically all of their freight will come from the far end of the run at the maximum charge of \$18 per ton. This line figures to a clear netting of two and a quarter millions per annum, even at its enormously increased coal consumption, and takes care of over fifty-six millions more of our bond debt.

It is not claimed that the initial voyages will produce revenue at any such rate. It is stated unequivocally, however, that as soon as the ships appear, the waiting market will begin feverishly to work to keep them on the run, and that within 12 months we will be loading very near to full capacity. Does anyone who has recently visited South America dispute it?

7,500-TON CLASS.

The complement of these ships can be reduced easily by 4 officers (2 pay clerks, 1 watch officer, 1 machinist or chief machinist) and 125 men, leaving them to operate with 10 officers and 163 men. Estimating their pay and rations on this basis, their coal consumption as the same and their necessary stores at 75 per cent of the passenger vessels, we get an annual upkeep and overhead of \$275,400. In other words, to pay for themselves they must haul an annual 55,000 tons at an average of \$5 per ton. Fifty-five thousand tons is 11 normal one-way runs of such a ship, and when the length of the usual \$5 per ton water haul is considered, 11 runs per year is a very lazy rate of working. These vessels will be the last of our freighters to leave the European lanes in normal course, and perhaps they never will leave them. If they do, there is plenty of tea in Formosa

more than \$5 per
are is sugar from
and south, and
money on these

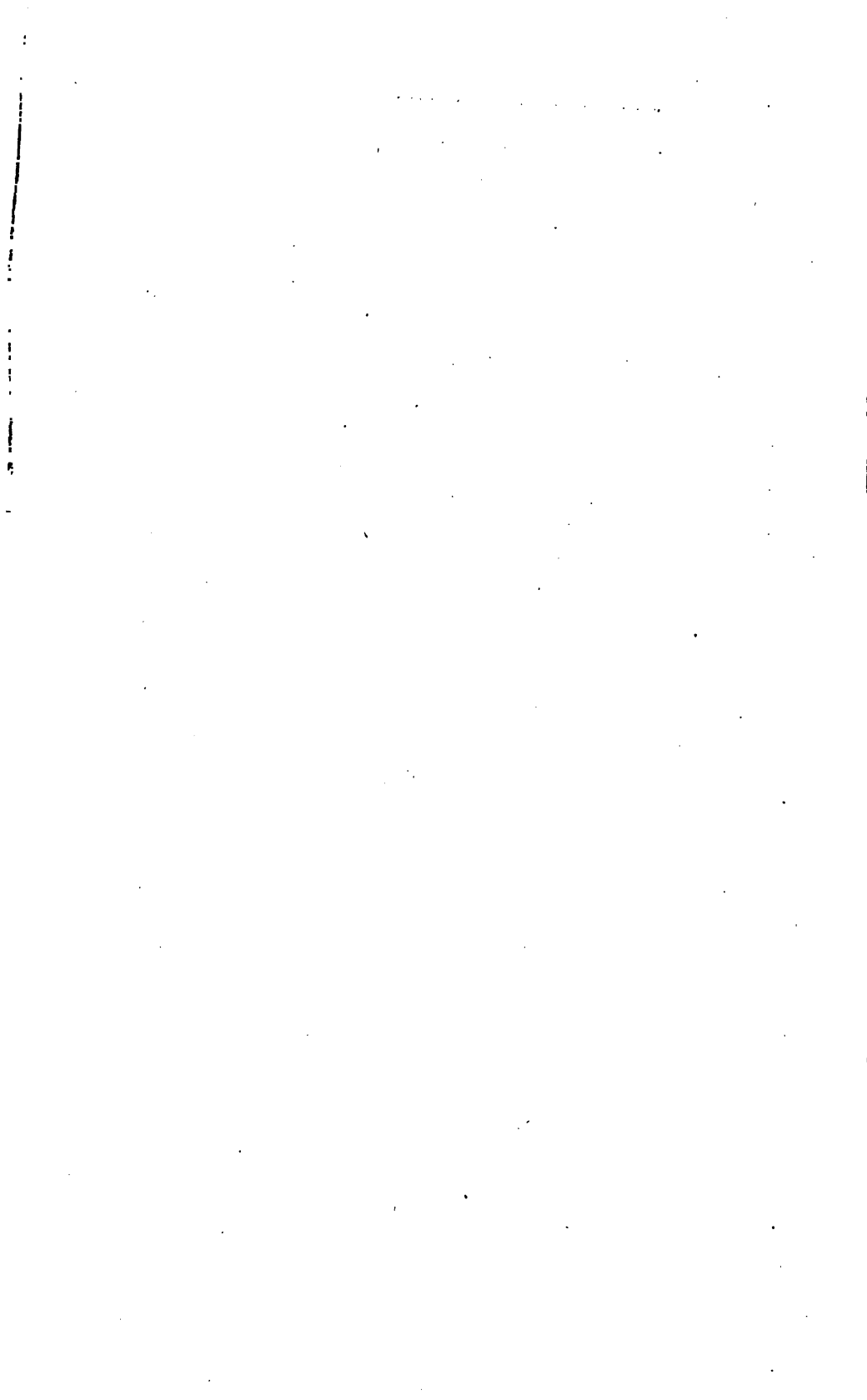
ption and com-
age. A pay roll
ot over \$50,000,
131,400 per year
n Argentine, ask
uch freight they
rt. Ask any of
count on from
er trade around,
reover, are ideal

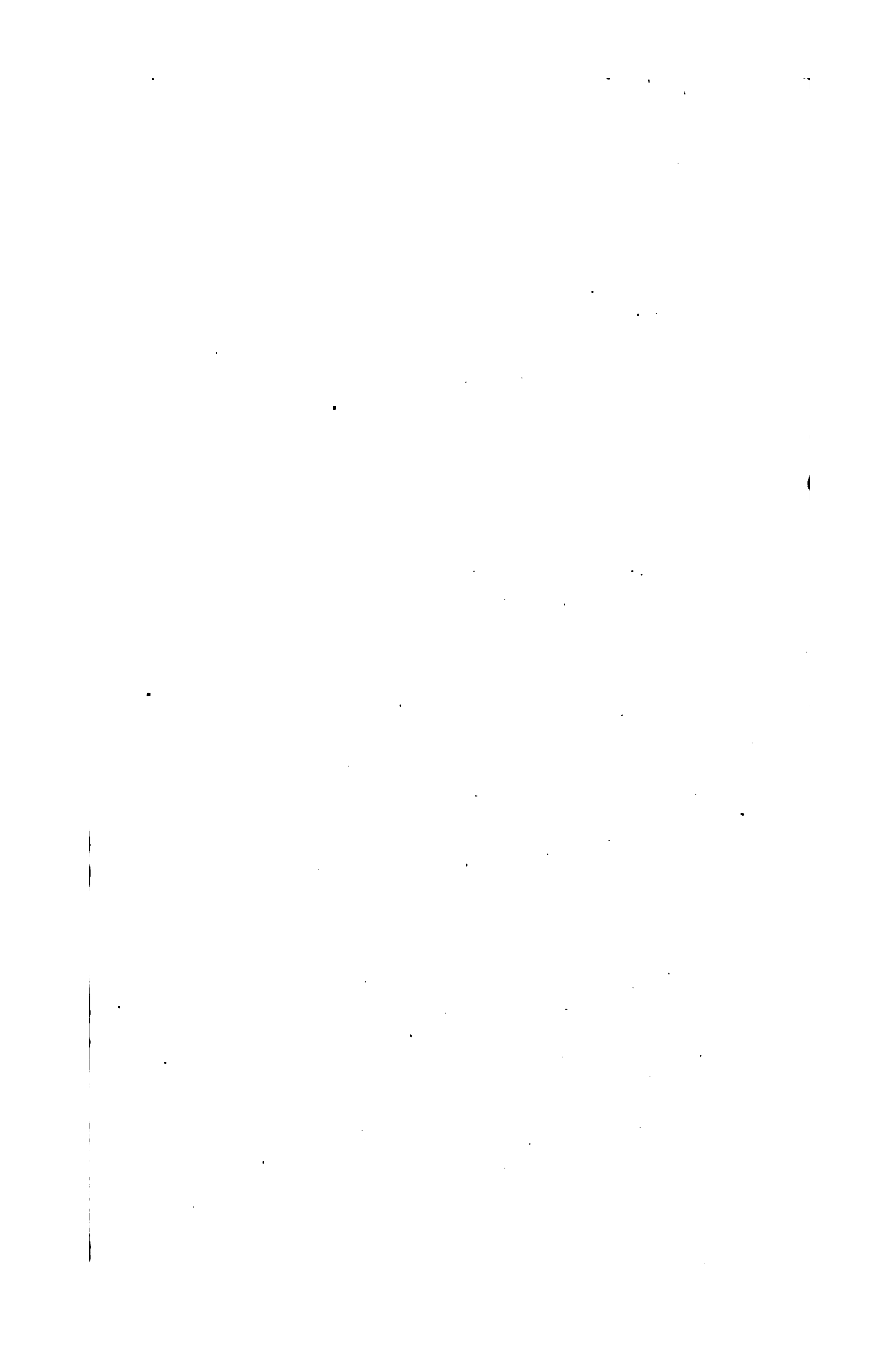
if busy at home
and the West
deavor for these
ning in a balance
o shake its head

international mer-
aordinary visita-
ounted an Ameri-
e have (1) more
more profitable
has cost us just
to find that we
of the taxpayer
up his principal

ver the questions
e to give us free
A great deal has
s from the First
has never been
egitimate dollars
at many gentle-
n not profitably
ps not; but here,
able while avoid-

no longer exist.
America & Sons,
concern in the





[REDACTED]



The following information was obtained from the records of the
 Department of the Interior, Bureau of Land Management, at
 Washington, D. C., on the date of the above mentioned
 hearing, to wit:

The following is a list of the names of the persons
 who have been granted permits to prospect for oil and
 gas on the public lands in the State of California, and
 the date of the grant of the permit:

Name of Person	Date of Grant
John A. Smith	1910
James B. Jones	1911
William C. Brown	1912
Robert E. White	1913
Thomas H. Green	1914
Charles F. Black	1915
Edward G. Gray	1916
Franklin D. Hall	1917
George W. Young	1918
Harold A. King	1919
Arthur L. Scott	1920
Donald M. Cook	1921
William F. Bailey	1922
John H. Carter	1923
Robert J. Evans	1924
Thomas M. Hill	1925
Charles K. Lewis	1926
Edward N. Clark	1927
Frank P. Adams	1928
George R. Baker	1929
Harold S. Bell	1930
Arthur T. Collins	1931
Donald W. Cook	1932
William V. Drake	1933
John W. Fisher	1934
Robert X. Gray	1935
Thomas Y. Hall	1936
Charles Z. King	1937
Edward A. Lewis	1938
Frank B. Miller	1939
George C. Moore	1940
Harold D. Nelson	1941
Arthur E. Phillips	1942
Donald F. Reed	1943
William G. Smith	1944
John H. Taylor	1945
Robert I. White	1946
Thomas J. Young	1947
Charles L. Baker	1948
Edward M. Clark	1949
Frank N. Evans	1950
George O. Hall	1951
Harold P. King	1952
Arthur Q. Lewis	1953
Donald R. Miller	1954
William S. Moore	1955
John T. Nelson	1956
Robert U. Phillips	1957
Thomas V. Reed	1958
Charles W. Smith	1959
Edward X. Taylor	1960
Frank Y. White	1961
George Z. Young	1962
Harold A. Baker	1963
Arthur B. Clark	1964
Donald C. Evans	1965
William D. Hall	1966
John E. King	1967
Robert F. Lewis	1968
Thomas G. Miller	1969
Charles H. Moore	1970
Edward I. Nelson	1971
Frank J. Phillips	1972
George K. Reed	1973
Harold L. Smith	1974
Arthur M. Taylor	1975
Donald N. White	1976
William O. Young	1977
John P. Baker	1978
Robert Q. Clark	1979
Thomas R. Evans	1980
Charles S. Hall	1981
Edward T. King	1982
Frank U. Lewis	1983
George V. Miller	1984
Harold W. Moore	1985
Arthur X. Nelson	1986
Donald Y. Phillips	1987
William Z. Reed	1988
John A. Smith	1989
Robert B. Jones	1990
Thomas C. Brown	1991
Charles D. White	1992
Edward E. Green	1993
Frank F. Black	1994
George G. Gray	1995
Harold H. Hall	1996
Arthur I. Young	1997
Donald J. King	1998
William K. Scott	1999
John L. Cook	2000
Robert M. Bailey	2001
Thomas N. Carter	2002
Charles O. Evans	2003
Edward P. Hill	2004
Frank Q. Lewis	2005
George R. Clark	2006
Harold S. Evans	2007
Arthur T. Hill	2008
Donald U. King	2009
William V. Lewis	2010
John W. Miller	2011
Robert X. Moore	2012
Thomas Y. Nelson	2013
Charles Z. Phillips	2014
Edward A. Reed	2015
Frank B. Smith	2016
George C. Taylor	2017
Harold D. White	2018
Arthur E. Young	2019
Donald F. Baker	2020
William G. Clark	2021
John H. Evans	2022
Robert I. Hall	2023
Thomas J. King	2024
Charles K. Lewis	2025
Edward L. Miller	2026
Frank M. Moore	2027
George N. Nelson	2028
Harold O. Phillips	2029
Arthur P. Reed	2030
Donald Q. Smith	2031
William R. Taylor	2032
John S. White	2033
Robert T. Young	2034
Thomas U. Baker	2035
Charles V. Clark	2036
Edward W. Evans	2037
Frank X. Hill	2038
George Y. King	2039
Harold Z. Lewis	2040
Arthur A. Miller	2041
Donald B. Moore	2042
William C. Nelson	2043
John D. Phillips	2044
Robert E. Reed	2045
Thomas F. Smith	2046
Charles G. Taylor	2047
Edward H. White	2048
Frank I. Young	2049
George J. Baker	2050
Harold K. Clark	2051
Arthur L. Evans	2052
Donald M. Hill	2053
William N. King	2054
John O. Lewis	2055
Robert P. Miller	2056
Thomas Q. Moore	2057
Charles R. Nelson	2058
Edward S. Phillips	2059
Frank T. Reed	2060
George U. Smith	2061
Harold V. Taylor	2062
Arthur W. White	2063
Donald X. Young	2064
William Y. Baker	2065
John Z. Clark	2066
Robert A. Evans	2067
Thomas B. Hill	2068
Charles C. King	2069
Edward D. Lewis	2070
Frank E. Miller	2071
George F. Moore	2072
Harold G. Nelson	2073
Arthur H. Phillips	2074
Donald I. Reed	2075
William J. Smith	2076
John K. Taylor	2077
Robert L. White	2078
Thomas M. Young	2079
Charles N. Baker	2080
Edward O. Clark	2081
Frank P. Evans	2082
George Q. Hill	2083
Harold R. King	2084
Arthur S. Lewis	2085
Donald T. Miller	2086
William U. Moore	2087
John V. Nelson	2088
Robert W. Phillips	2089
Thomas X. Reed	2090
Charles Y. Smith	2091
Edward Z. Taylor	2092
Frank A. White	2093
George B. Young	2094
Harold C. Baker	2095
Arthur D. Clark	2096
Donald E. Evans	2097
William F. Hill	2098
John G. King	2099
Robert H. Lewis	2100

